



Figure 1. C4-V3 Th-CTL Peptides Induce HLA B7 Reactive CD8⁺ CTL in Normal HIV-1 Seronegative Humans. Panels A-C show specific lysis from *in vivo* immunization and *in vitro* restimulation against each of the V3 B7 CTL epitope variants. BLCL: lymphoblastoid cell line (BLCL) no peptide coating control. C4= C4 Th determinant peptide on BLCL. V3MN, V3RF, V3EV91, as V3Can0A are the B7 CTL epitope variant peptide coated on BLCL. Data show patient in Panel A responded to 1 of 4 B7 CTL epitope variants (the HIV EV91 variant) while the patient in Panel C responded to 3 of 4 B7 epitope variants (HIVMN, EV91 and Can0). Panels B and D show 2 HLA B7 negative individuals that made no CTL response to the B7-optimized CTL peptide immunogen after both *in vivo* immunization and *in vitro* restimulation.